

Nuclear Power Companies Hunker Down As Uranium Prices Soar

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Matthew Dalton

NEW YORK -Supply disruptions and dwindling inventories have created a perfect storm in the uranium market. Now electric utilities are hoping they can wait out the bad weather.

The price of uranium, the fuel of nuclear power plants, has soared to \$95 a pound, from less than \$20 three years ago. Market participants say they expect uranium to become even more expensive, at least in the short term.

Recent disruptions at two of the world's largest uranium mines have seriously threatened global supply, putting added pressure on prices at a time when new production, until very recently, has been almost non-existent.

Some of the industry's biggest nuclear operators are simply trying to get through the next few years without buying too much uranium.

"There's a period where the market is going to be very ugly from a buyer's standpoint," said Frank Rives, director of nuclear fuel at Entergy Corp. (ETR), the second-largest nuclear power plant owner in the U.S. "But in the long term, pricing will settle into a more reasonable area."

The hope is that a wave of new uranium production, spurred by current high prices, will cool down the market before too many of the long-term contracts nuclear power operators have signed to lock in supplies at lower prices, expire.

"The impact of the rising prices isn't now, it's later," said Jim Malone, vice president of nuclear fuels at Exelon Corp. (EXC), the largest nuclear operator in the U.S. "The prices in the contracts we have are reasonable."

Malone said producers across the globe are offering prices in long-term contracts of around \$45 per pound, much lower than spot market offers, but double the price a few years ago.

"I think we can, so to speak, weather the storm of these very high prices," Malone said.

Profitability Eroding

The cost of fuel is a relatively small component of the total cost of operating a nuclear plant, much smaller than the fuel costs for coal or natural gas-fired power plants. Malone says total nuclear fuel costs - which include the uranium itself and the process of enriching it into a more energy intensive form - are 25%-28% of total production costs.

If fuel prices don't moderate, nuclear plants will be somewhat less profitable, particularly if the enrichment process becomes more expensive, as expected by the Nuclear Energy Institute, which represents nuclear power companies and uranium suppliers.

"We anticipate that you'll start seeing an increase," said Felix Killar, the institute's director of fuel supply.

Nuclear power companies that operate in regulated states can probably recover the higher costs of uranium from ratepayers. But nuclear operators in competitive markets, such as Exelon, Entergy, FPL Group Inc. (FPL) and Dominion Resources (D), will see higher fuel costs eat into their profit margins.

Despite the hope of uranium buyers, new production hasn't yet reached the market. Production in 2006 actually dropped from 2005. Total global production is now about 100 million pounds a year, compared with global demand of 180 million pounds.

For years, the difference between supply and demand was made up with extra supply from government nuclear weapons programs that were sold to the private sector. But this inventory has been steadily dwindling and, recently, gobbled up by speculators looking to profit from rising prices.

Supplies In Jeopardy

The supply situation took a sudden downturn last October, when heavy rains and flooding prevented the opening of the massive Cigar Lake mine in northern Saskatchewan, Canada. That mine was expected to produce 18 million pounds of uranium a year, or about 10% of global demand. Mine owner Cameco Corp. says Cigar Lake won't be started until 2010.

The market endured another blow at the beginning of March, when a cyclone struck the Ranger mine in Australia, which produces 14.3 million pounds of uranium a year. Energy Resources of Australia, the mine's owner, declared force majeure on deliveries and said production would be impacted into the second half of 2007.

"Utilities are scrambling to cover their supplies, and at the same time trying not to show too much buying interest," said Kevin Smith, who connects buyers and sellers at the energy brokerage Evolution Markets.

The disruptions at the two mines highlight the current perilous state of the global uranium market. Because prices were low for many years, only the lowest-cost producers at the largest mines could afford to expand production. That means uranium production today is now highly concentrated at a few massive mines, mainly in Australia and Canada. A disruption at any of them could be disastrous for uranium supply worldwide.

"Up to 85% of the supply comes from large projects," said Jim Cornell, chief executive of Nukem Inc., a uranium trading firm. Cornell suggested the following comparison: "Say tomorrow, Iran stopped exporting oil - you can imagine what it would do to oil prices."

Adding to the shortage is the entry of hedge funds and other speculators into the market. These participants have been buying up supplies of uranium in the hopes of benefiting from rising prices, to the irritation of nuclear power companies that are scouring the marketplace for supply.

The Nuclear Energy Institute sent a letter to the U.S. Department of Energy in February asking the department to create a "Strategic Nuclear Fuel Reserve" that can only be accessed by commercial nuclear reactors.

Some in the industry believe speculators may ultimately help the market by assuring that prices are high enough for producers to develop new mines that otherwise wouldn't be economic at lower prices.

"The reality is, (the speculators) have sent an amplified signal to the market to encourage exploration and production," Malone said. "In the longer term they've done us a favor, though some of my colleagues have cringed at the short-term costs."

In the long term, market participants are looking to significant new uranium demand from a global surge in the construction of nuclear plants. Russia, China and India all have plans to build new nuclear plants. Several U.S. companies also plan to build new plants. Nuclear power, which doesn't produce greenhouse gases or rely on foreign fossil fuels, is now seen as crucial to satisfying electricity demand as global warming and conflicts in the Middle East become greater concerns.

"We still don't know to what extent all of these new reactor builds that are planned are going to be fulfilled," said Cornell of Nukem. "That'll be the million-dollar question two to three years down the road."

-By Matthew Dalton, Dow Jones Newswires; 201-938-4604;
matthew.dalton@dowjones.com